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REMARKS

Claims 1-7, 9, 11-15, 17, 19, 21-24, 26-40, and 44-46 are pending.

Claims 1-7, 9, 11-15, 17, 19, 21-24, 26-40, and 44-46 stand rejected.

Claims 6, 9, 19, 26, 27, 29, 45, and 46 are currently amended.

Claim 47 has been added.

Claim Objections

Claim 46 is objected to because "means for" is repetitive. The second instance of "means for" has been deleted.

Claim 6 is objected to because "system" should be "systems". Claim 6 has been amended to recite "systems."

Claim 9 is objected to because "wherein" is repetitive and "uniform resource locator" is not well known in the art. The second instance of "wherein" has been deleted. Support for an embodiment of the term "uniform resource locator" can be found in various locations of the present application such as page 1, lns. 14-20.

Multiple claims are objected to because the terminology of a client computer, or client computing system was not static throughout the client. Appropriate corrections have been made.

In light of the amendments and remarks presented herein, Applicant respectfully requests withdrawal of the objections.

Claim Rejections - 35 U.S.C. § 112

Claim 45 stand rejected under 35 U.S.C. § 112, second paragraph, for lack of antecedent basis for "the described dynamically generated electronic file" in line 18. Claim 45 has been amended to replace "described" with -- any identified --.

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Claim Rejections - 35 U.S.C. § 102

Claims 1-7, 9, 11-13, 17, 19, 21-24, 26-31, 33, 36-40, and 44-45 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,038,601 issued to Lambert et al. (hereinafter "*Lambert*"). The rejection is respectfully traversed.

Applicant thanks the Examiner for the thorough examination.

Applicants respectfully submit that the *arguably* relevant teachings and suggestions of *Lambert* relate to caching of static web pages and contain no teachings or suggestions relating to "a dynamic content caching and retrieval system" as recited by claim 45, "a method of caching and retrieving cached dynamically generated files" as recited by claim 29, or "a dynamic content caching and retrieval system" as recited by claim 46. (emphasis added).

Regarding caching static documents, the *background* section of the present application states, "one technique to make delivery of static documents more efficient is to implement a web cache." *Present Application*, p. 2, lns. 19-20. "Such systems work well when the documents are relatively static." *Id.*, lns. 22-23. (emphasis added).

However, the background section also points out that dynamic content production is distinct from static documents. "As a web site content becomes more sophisticated, it becomes more difficult to maintain high levels of performance." *Id.*, lns. 24-25. "If, on an opening web page, the user selects several product options, a subsequent web page can be very different, depending upon the options selected." *Id.*, lns. 27-29. "To accommodate this kind of flexibility, many web pages [] are only created by applications running on or in conjunction with the web server computer system after a user has made a specific request." *Id.* p.2, ln. 29 – p. 3, ln. 2.

Although traditional caching systems, such as the system in *Lambert*, may work well for static web pages, "traditional web page caching systems are ineffective when the web page content is dynamic." *Id.*, lns. 4-5.

Lambert does not address caching and retrieval of dynamic web pages. *Lambert* discusses its invention in the context of "users subscrib[ing] to "channels", which automatically bring new content to the user's machine." *Lambert*, col. 4, lns. 18-20. *Lambert* teaches that "An

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intelligent caching infrastructure that uses information (called "Meta-Data") about the content to control client and intermediate caches reduces the wide-area networking problems generally attributed to interactive content by allowing the caches to manage expiration, compaction, bulk-delivery and other operations guided via Meta-Data from the content provider." *Lambert*, col. 4, lns. 47-53. The "'meta-data" is used to configure much of the behavior of caching servers." *Id.* col. 11, lns. 4-5. "Content providers are allowed to configure their sites." *Id.* col. 11, lns. 6-9. "Alternatively, "the channel developer can tag their subscription notification with a "meta data URL". *Id.* col. 11, lns. 38-40. *Lambert* also discusses a TOC (Table of Contents), which "is simply meta-data shared between the caching server and its back-end servers used to configure the caching server's behavior." *Id.*, col. 8, lns. 3-6. Applicant respectfully submits that *Lambert* simply does not discuss "a dynamic content caching and retrieval system" as recited by claim 45, "a method of caching and retrieving cached dynamically generated files" as recited by claim 29, or "a dynamic content caching and retrieval system" as recited by claim 46.

In contrast to the present invention of claim 45, since *Lambert* neither teaches nor suggests a system comprising "dynamically generated electronic files" as recited by claim 45, *Lambert* contains no teaching or suggestion of a "dynamic content caching and retrieval system" as also recited by claim 45.

The Examiner correctly notes that *Lambert* teaches that:

A subscriber's requests to retrieve certain published content are managed by subscription manager 306 which resides on the subscriber's client machine. Subscription manager 306 communicates with Web browser 100 on the client machine to demand the requested content. Web browser 100 then sends an HTTP request to a remote caching server 204. In response, caching server 204 either retrieves cached content from cache 300 or sends an HTTP request via the Internet to a publisher's machine to retrieve non-cached content. *Lambert*, col. 5, lns. 51-60.

However, Applicant respectfully submits that the *arguably* relevant teachings of *Lambert* in col. 5, lns. 51-60 are generally characterized by a traditional static web page caching and retrieval system and, as noted above, Applicant respectfully submits that "traditional web page caching systems are ineffective when the web page content is dynamic." *Id.*, lns. 4-5.

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To overcome the ineffectiveness of traditional static web page caching systems such as those taught by *Lambert*, the present invention of claim 45 includes "dynamically generated electronic files stored in a storage medium, each dynamically generated electronic file includes an identifier that identifies dynamically generated presentation information stored in the file." *Lambert* does teach that "more complex meta-data that is derived from user feedback can initially be generated automatically and then automatically updated as user feedback is gathered." "The latter mechanism is described in further detail in the following sections [of *Lambert*]." Further details of other meta-data applications are also described in the following sections [of *Lambert*]." *Lambert*, col. 11, lns. 58-63. However, the "more complex meta-data" described by *Lambert* relate to "lookahead" operations (see *Lambert* section 3.5 beginning at col. 15, ln. 27.) The meta-data referred to by *Lambert* does not relate to "an identifier that identifies dynamically generated presentation information stored in the [dynamically generated electronic] file" as required by claim 45.

Furthermore, the present invention of claim 45 further distinguishes over *Lambert* by including a "a computer readable representation ... having a presentation state signature based on a presentation state defined, at least in part, by one or more parameters selected by a user interacting with a file displayed by the client computer system." (emphasis added). "[T]he computer readable representation is useful to identify one of the dynamically generated electronic files in which stored presentation information is associated with the presentation state upon which the signature is based." *Present Application*, claim 45. (emphasis added).

Additionally, as noted by the Examiner, *Lambert* does discuss "lookahead caching" in some detail, particularly in col. 15. *Lambert* teaches that "lookahead caching then attempts to fetch the desired content before the user actually travels to the new location." The Examiner states that "*Lambert* discloses that the lookahead requests are generated from a given page through his algorithm process." *Office Action*, p. 16, section 40. "The files are generated dynamically as the user requests new pages and links, when the algorithm dynamically restarts the process all over again from the new page." *Id.* Applicant respectfully disagrees with the Examiner's characterization of *Lambert's* associated teachings. *Lambert* states that:

lookahead caching uses predictive algorithms to determine where a user may go given their current location. Lookahead caching then attempts to fetch the

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desired content before the user actually travels to the new location. Thus, when the user actually travels along a web link to a new page, that page is already present locally and can be displayed very quickly. *Lambert*, col. 15, lns. 34-40.

Thus, *Lambert* is fetching and caching static web pages and dynamically generating electronic files. Applicant respectfully submits that contrary to the Examiner's reason for rejection, *Lambert* neither teaches nor suggests that "the computer readable medium includes a routine executable by the processor to determine if the presentation state signature of the computer readable representation identifies one of the dynamically generated electronic files stored in the memory of the system, to retrieve any identified dynamically generated electronic file, and to serve the retrieved file to the client computer system. *Present Application*, claim 45. (emphasis added).

For at least reasons similar to those discussed above with reference to claim 45, *Lambert's* teachings of caching of static web pages neither teach nor suggest the present invention of claim 29, which recites "a method of caching and retrieving cached dynamically generated files that each include presentation information characterized by respective presentation states, wherein each dynamically generated file is associated with a file identifier that is derived from state information that describes contents of the associated dynamically generated electronic file." (emphasis added). Furthermore, *Lambert* fails to teach or suggest "receiving a file request that includes state information based on selections of a user interacting with a web page using at least one client computer system, determining whether the file request identifies one of the cached dynamically generated files, and retrieving the dynamically generated file identified by the file request and transmitting the file to the at least one client computer system if the file exists in a cache." *Present Application*, claim 29. (emphasis added).

Applicant respectfully submits that claims dependent upon independent claims 29, 45, and 46 are allowable for at least the same reasons as the independent claims upon which they depend.

Withdrawal of the rejection is respectfully requested.

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Claim Rejections - 35 U.S.C. § 103

Claims 34-35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,038,601 issued to Lambert et al. in view of U.S. Patent No. 6,006,264 issued to Colby et al. (hereinafter "*Colby*"). The rejection is respectfully traversed.

Colby generally relates to a "Method and system for directing a flow between a client and a server." *Colby* title. *Colby* teaches "that an HTTP 404 error in response to a request for the requested content" indicates that a server "no longer contains the requested content". *Colby* col. 12, lns. 6-13. Applicant respectfully submits that *Colby* does not add any relevant teachings to *Lambert* with reference to the allowability of claim 29. Thus, Applicant respectfully submits that claims 34-35, which depend upon independent claim 29, are allowable for at least the same reasons as those discussed above with reference to claim 29.

Withdrawal of the rejection is respectfully requested.

Claims 14, 15, and 32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,038,601 issued to Lambert et al. in view of U.S. Patent No. 6,289,358 issued to Mattis et al. (hereinafter "*Mattis*"). The rejection is respectfully traversed.

Mattis relates to "a method [] for caching and delivering an alternate version from among a plurality of alternate versions of information objects." *Mattis*, Abstract. "In the cache, a vector of alternates is associated with a key value that identifies the information object." *Id.* "The vector of alternates stores information that describes the alternate, the context and constraints of the object's use, and a reference to the location of the alternate's object content." *Id.* Applicant respectfully submits that *Mattis* does not add any relevant teachings to *Lambert* with reference to the allowability of claims 29 and 45. Thus, Applicant respectfully submits that claims 14 and 15, which depend upon independent claim 45, and claim 32, which depends upon independent claim 29, are allowable for at least the same reasons as those discussed above with reference to claims 29 and 45.

Withdrawal of the rejection is respectfully requested.

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Claim 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,038,601 issued to Lambert et al. The rejection is respectfully traversed.

For at least reasons similar to those discussed above with reference to claim 45, *Lambert's* teachings of caching of static web pages neither teach nor suggest the present invention of claim 46, which recites "means for caching the dynamically generated electronic files and associating a respective file identifier with each of the dynamically generated electronic files, wherein each file identifier is derived from state information that describes contents of the associated dynamically generated electronic file." (emphasis added). Furthermore, *Lambert* fails to teach or suggest "means for receiving a file request that includes state information based on selections of a user interacting with a web page using at least one client computer system, means for determining whether the file request identifies one of the cached dynamically generated electronic files, and means for retrieving the dynamically generated electronic file identified by the file request and transmitting the file to the at least one client computer system if the file exists in a cache." *Present Application*, claim 46. (emphasis added).


Withdrawal of the rejection is respectfully requested.

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CONCLUSION

In view of the amendments and remarks set forth herein, the application is believed to be in condition for allowance and a notice to that effect is solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

I hereby certify that this RCE Submission -- Response to Final Office Action is being transmitted via facsimile to the USPTO on November 19, 2003.

 11-19-2003
Attorney for Applicant(s) Date of Signature

Respectfully submitted,



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